

RDX Highly-Available Monitoring Architecture

RDX's Advanced Monitoring Offering

Although the database is one of the key ingredients of every application, it is important to understand it is not the only component that can prevent a critical application from being available to the end users. To ensure continuous 24 x 7 availability for all application components, RDX has designed a lightweight, easily customizable monitoring solution as the foundation of our monitoring architecture.

RDX offers a wide array of standard monitoring agents that allow us to monitor every component of the application architecture including database, middle tier, application and non-database servers. From monitoring a database buffer cache hit ratio to a third-party application error log, our support team is able to quickly deploy a customized monitoring solution that meets each customer's unique monitoring requirements.

RDX Highly-Available Monitoring Architecture

A small client-side monitoring program is installed on each monitored target. The client installation does not require a downtime or reboot to complete and typically takes 30 to 45 minutes per target installation. The software consumes 5 to 8 MBs of disk space, 10 MBs of memory and consumes very limited CPU resources. An outbound-only port is opened on the customer's firewall. Monitoring data is streamed to the primary notification server contained at our hosting provider's data center. The primary server forwards all monitoring data to a failover server which ensures that both environments are in-synch.

When notifications are received, the monitoring server generates tickets which are assigned to RDX personnel. RDX's Database Operations Center (DOC) specialists review ticket notifications on a 24 x 7 x 365 basis. DOC specialists start at a high level screen that shows the status of key systems and devices, with indicators that highlight database availability, performance, disk/cpu/memory utilization, response time, etc. Constant communications are held with product support teams to discuss problem prevention and problem resolution. Historical

information is transferred to a database repository for historical reporting and trend analysis. RDX's portal feature allows customers to review key availability and performance indicators. RDX customers are able to see the same data we do.

The Power of Standard and Custom Agents

RDX's monitoring software runs event "agents" on monitored targets. These agents return status information to the RDX Notification Server. RDX standard agents allow us to monitor key resource consumption indicators, server and database availability, HA architectures and confirmation of OS and database backups.

RDX has dozens of custom agents that allow RDX to custom tailor a monitoring solution to meet each customer's unique monitoring requirements. Custom agents can be configured to monitor and trend any process that returns a dynamic value. All monitoring data returned is automatically stored in a secured database repository which allows historical trending, forecasting of future utilization spikes and capacity planning.

Custom agents and trending reports that are built to monitor an event that is unique to the customer will be charged at the RDX standard hourly rate. Please ask your RDX sales contact for more information on standard and custom event agents available.

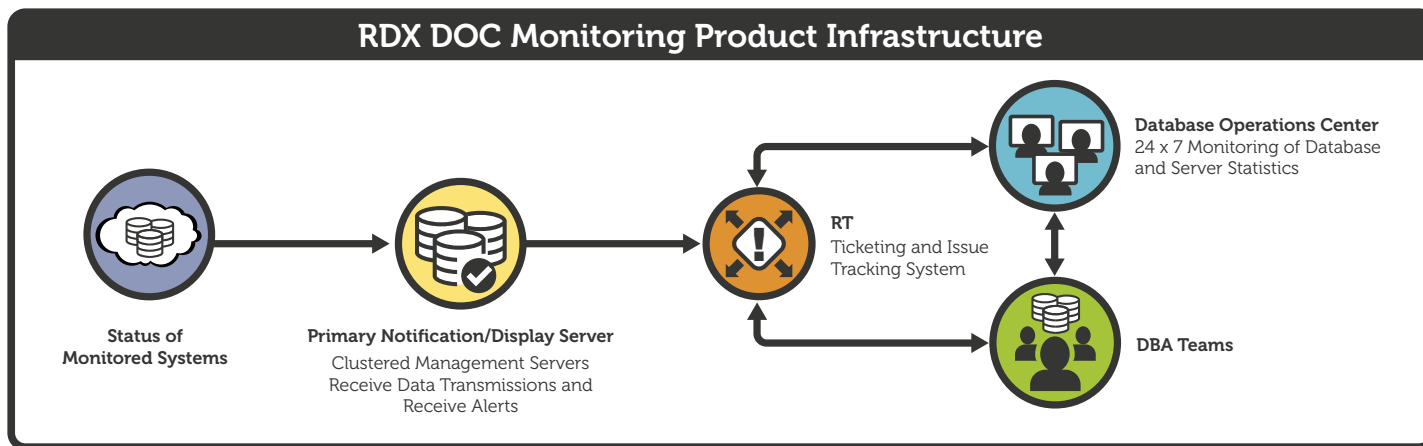
Security is of Paramount Importance

The push-only architecture limits security exposure because the client agents transfer monitoring data over an outbound only port. The monitoring data stream consists of numeric performance values and "on/off" indicators for availability and performance alerts.

RDX Monitoring Automation Solution

Improving the speed of problem resolution is an integral part of RDX's monitoring strategy. RDX has chosen GEN-E Resolve to automate diagnostic data collection and perform basic analysis activities.

RDX DOC Monitoring Product Infrastructure



RDX's goal is to use automation to improve our ability to monitor and analyze problems that affect the availability and performance of your systems. This initial implementation is the first building block of a new architecture that will provide RDX with a strong foundation for future automation enhancements.

GEN-E Resolve automates the collection of key diagnostic data to shorten the time required to perform problem analysis and ensure a consistent data collection process is performed. The product's diagnostic automation capabilities allows RDX to capture the knowledge of RDX Subject Matter Experts to improve the quality of problem resolution and reduce the time required to solve issues.

GEN-E Resolve requires two-way communication to a dedicated server IP address through RDX's connectivity mechanism agreed to by the customer during integration. It is not open to the public internet, only to the connection RDX uses to access your environment. Ports are open to specific RDX IP addresses. The monitoring server initiating the calls is hardened according to PCI standards, has access controlled by two factor authentication and can only be accessed by designated personnel. GEN-E Resolve's security logging features allows RDX to view all actions performed in the automation environment.

RDX firmly believes that process automation will be the key to providing a high quality monitoring and issue resolution offering to our customers.